### SEVENTH APPROXIMATION DATA FORM FOR CONVENTIONAL ASSESSMENT UNITS (NOGA, Version 5, 6-30-01)

### **IDENTIFICATION INFORMATION**

Assessment Geologist:						Date:	9/23/2002
Region:						Number:	5
Province:	San Juan Basin					Number:	5022
Total Petroleum System:						Number:	502201
Assessment Unit:						Number:	50220101
Based on Data as of:	PI/Dwights 2	2001, NR	G 2001 (data	a current thro	ugh 1999)		
Notes from Assessor							
	CHARAC	TERISTI	CS OF ASS	ESSMENT U	NIT		
Oil (<20,000 cfg/bo overall) o	<u>r</u> Gas ( <u>&gt;</u> 20,0	00 cfg/bo	overall):	Gas			
What is the minimum accumu (the smallest accumulation that						rs)	
No. of discovered accumulation	ons exceeding	g minimun	n size:	Oil:	0	Gas	1
Established (>13 accums.)	F	rontier (1-	13 accums.)	XH	-lypothetical	(no accums	s. <u>)</u>
Madian sine (sursum) of discount			(				
Median size (grown) of discov	ered oli accui		•	Ond Ord		Ord Ord	
Median size (grown) of discov	orod gas ass	1st 3rd		2110 310_		310 310	
iviedian size (grown) or discov	ereu gas acc	umulalion 1st 3rc	` •	2nd 3rd		3rd 3rd	
		130 010				514 516	
Assessment-Unit Probabilit	ies:						
<u>Attribute</u>				F	Probability	of occurrer	nce (0-1.0)
1. CHARGE: Adequate petro	leum charge	for an und	discovered a				
2. ROCKS: Adequate reserve							
3. TIMING OF GEOLOGIC EV							
Assessment-Unit GEOLOGI	C Probability	/ (Produc	t of 1, 2, and	d 3):(8 b		1.0	=
4. ACCESSIBILITY: Adequa							
<u>&gt;</u> minimum size							1.0
	HND	ISCOVER	RED ACCUM	PACITA IIII			
No. of Undiscovered Accum					ist that are	> min siz	2.
No. of offdiscovered Accum		,		ınknown valu		<u>-</u> 111111. 312	<b>5</b> : .
	(611	oor tallity	or invoca but t	vaid	00)		
Oil Accumulations:	min. no.	(>0)	0	median no.	0	max no.	0
Gas Accumulations:		` '	1	median no.	5	max no.	
Sizes of Undiscovered Accumulations: What are the sizes (grown) of the above accums?:							
(variations in the sizes of undiscovered accumulations)							
	_	_					
Oil in Oil Accumulations (mmb	,			median size		max. size	
Gas in Gas Accumulations (bo	cīg):min	. size	3	median siz	12	max. size	120

### AVERAGE RATIOS FOR UNDISCOVERED ACCUMS., TO ASSESS COPRODUCTS

(uncertainty of f	ixed but unknown	values)	
Oil Accumulations: Gas/oil ratio (cfg/bo) NGL/gas ratio (bngl/mmcfg)		median	maximum ————
Gas Accumulations: Liquids/gas ratio (bliq/mmcfg) Oil/gas ratio (bo/mmcfg)	minimum 5	median 10	maximum 20

#### SELECTED ANCILLARY DATA FOR UNDISCOVERED ACCUMULATIONS

(variations in the propertie	es of undiscovere	ed accumulations)	
Oil Accumulations:	minimum	median	maximum
API gravity (degrees)			
Sulfur content of oil (%)			
Drilling Depth (m)			
Depth (m) of water (if applicable)			
Gas Accumulations:	minimum	median	maximum
Inert gas content (%)	0.1		4
CO <sub>2</sub> content (%)	0.1	0.5	1
Hydrogen-sulfide content (%)	0.1	0.7	2
Drilling Depth (m)	80	510	1020
Depth (m) of water (if applicable)			

### ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO STATES

**Surface Allocations** (uncertainty of a fixed value)

1.	Colorado	represents	15.21	areal % of the total ass	essment unit
F \	in Oil Fields: Richness factor (unitless multiplier): /olume % in parcel (areal % x richness Portion of volume % that is offshore (0-	factor):	minimum	median 	maximum
F \	es in Gas Fields: Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-	factor):	minimum	median  30 0	maximum
2.	New Mexico	represents	84.79	areal % of the total ass	sessment unit
F \	in Oil Fields: Richness factor (unitless multiplier): /olume % in parcel (areal % x richness Portion of volume % that is offshore (0-	factor):	minimum	median 	maximum
F	us in Gas Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-	factor):	minimum	70 0	maximum
3.		represents		areal % of the total ass	sessment unit
F \	in Oil Fields: Richness factor (unitless multiplier):  /olume % in parcel (areal % x richness  Portion of volume % that is offshore (0-	factor):	minimum	median 	maximum
F \	is in Gas Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-	factor):	minimum	median 	maximum
4.		represents		areal % of the total ass	sessment unit
F \	in Oil Fields: Richness factor (unitless multiplier): /olume % in parcel (areal % x richness Portion of volume % that is offshore (0-	factor):	minimum	median 	maximum
F \	as in Gas Fields: Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness  Portion of volume % that is offshore (0-	factor):	minimum	median 	maximum

5	represents		areal % of the total ass	sessment ur	lit
Oil in Oil Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-1)	factor):	minimum	median		maximum
Gas in Gas Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-1	factor):	minimum	median		maximum
6.	represents		areal % of the total ass	sessment ur	nit
Oil in Oil Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-1)	factor):	minimum	median		maximum
Gas in Gas Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-1	factor):	minimum	median		maximum
7	represents		areal % of the total ass	sessment ur	nit
Oil in Oil Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-1	factor):	minimum	<u> </u>		maximum
Gas in Gas Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-1	factor):	minimum			maximum
8.	represents		areal % of the total ass	sessment ur	nit
Oil in Oil Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-1	factor):	minimum	median		maximum
Gas in Gas Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-1	factor):	minimum	median 		maximum

## ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO LAND ENTITIES Surface Allocations (uncertainty of a fixed value)

1.	Federal Lands	represents	43.07	areal % of the total assessment unit		
R	in Oil Fields: tichness factor (unitless multiplier): olume % in parcel (areal % x richness f		minimum	median	maximum	
	ortion of volume % that is offshore (0-1					
	s in Gas Fields: Lichness factor (unitless multiplier):		minimum	median	maximum	
V	olume % in parcel (areal % x richness fortion of volume % that is offshore (0-1	factor):		3 0		
2.	Private Lands	represents	18.60	areal % of the total ass	essment unit	
F	in Oil Fields: tichness factor (unitless multiplier): olume % in parcel (areal % x richness f		minimum	median	maximum	
	outrie % in parcer (arear % kindings in outriess in outries).			<del>-</del>	-	
	s in Gas Fields: tichness factor (unitless multiplier):		minimum	median	maximum	
	olume % in parcel (areal % x richness f			3		
Р	ortion of volume % that is offshore (0-1	00%)				
3.	Tribal Lands	represents	34.33	areal % of the total ass	essment unit	
F	in Oil Fields: tichness factor (unitless multiplier): olume % in parcel (areal % x richness f		minimum	median	maximum	
Ρ	ortion of volume % that is offshore (0-1	00%)				
F	s in Gas Fields: tichness factor (unitless multiplier):		minimum	median	maximum 	
	olume % in parcel (areal % x richness fortion of volume % that is offshore (0-1			93 0		
4.		•		areal % of the total ass	essment unit	
F V	in Oil Fields: Lichness factor (unitless multiplier):  Volume % in parcel (areal % x richness fortion of volume % that is offshore (0-1)	factor):	minimum	median	maximum	
<u>Ga</u> F	s in Gas Fields: tichness factor (unitless multiplier): folume % in parcel (areal % x richness fortion of volume % that is offshore (0-1)	factor):	minimum	median	maximum	

5.	CO State Lands	represents	0.25	areal % of the total as:	sessment unit
F	in Oil Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-	factor):	minimum	median	maximum 
F	s in Gas Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-	factor):	minimum	1	maximum
6.	NM State Lands	represents	3.74	areal % of the total as	sessment unit
F	in Oil Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-2	factor):	minimum	median ————————————————————————————————————	maximum 
F V	s in Gas Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-	factor):	minimum	median 0 0	maximum ———————————————————————————————————
7.		represents		areal % of the total as:	sessment unit
F	in Oil Fields: Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-	factor):	minimum	median	maximum 
F	s in Gas Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-	factor):	minimum	median	maximum ———————————————————————————————————
8.		represents		areal % of the total as:	sessment unit
F	in Oil Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-	factor):	minimum	<u>-</u>	maximum 
F	s in Gas Fields: Richness factor (unitless multiplier): /olume % in parcel (areal % x richness Portion of volume % that is offshore (0-	factor):	minimum	median	maximum

9	represents		areal % of the	total asse	essment ur	nit
Oil in Oil Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-1)	factor):	minimum		nedian		maximum
Gas in Gas Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-1	factor):	minimum		nedian		maximum
10	represents		areal % of the	total asse	essment ur	nit
Oil in Oil Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-1)	factor):	minimum	m - —	nedian		maximum
Gas in Gas Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-1	factor):	minimum		nedian		maximum
11	represents		areal % of the	total asse	essment ur	nit
Oil in Oil Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-1)	factor):	minimum		nedian		maximum
Gas in Gas Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-1	factor):	minimum		nedian		maximum
12	represents		areal % of the	total asse	essment ur	nit
Oil in Oil Fields:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness  Portion of volume % that is offshore (0-1)	factor):	minimum	. <u> </u>	nedian		maximum
Gas in Gas Fields: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-1	factor):	minimum	m 	nedian		maximum

## ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO FEDERAL LAND SUBDIVISIONS Surface Allocations (uncertainty of a fixed value)

Bureau of Land Management (BLM) represents	34.64	areal % of the total assessment unit	
Oil in Oil Accumulations:  Richness factor (unitless multiplier):	minimum	median m	naximum
Volume % in parcel (areal % x richness factor): Portion of volume % that is offshore (0-100%)			
Gas in Gas Accumulations: Richness factor (unitless multiplier):	minimum	median	maximum
Volume % in parcel (areal % x richness factor): Portion of volume % that is offshore (0-100%)		2 0	
2. BLM Wilderness Areas (BLMW) represents		areal % of the total assessment unit	
Oil in Oil Accumulations:  Richness factor (unitless multiplier):	minimum		naximum
Volume % in parcel (areal % x richness factor): Portion of volume % that is offshore (0-100%)			
Gas in Gas Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):	minimum	median	maximum
Portion of volume % that is offshore (0-100%)			
3. BLM Roadless Areas (BLMR) represents		areal % of the total assessment unit	
Oil in Oil Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median m	naximum
Gas in Gas Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median	maximum
National Park Service (NPS) represents	0.00	areal % of the total assessment unit	
Oil in Oil Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median m	naximum
Gas in Gas Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median	maximum

5.	NPS Wilderness Areas (NPSW) represent	s	areal % of the total ass	sessment unit
F V	in Oil Accumulations: Richness factor (unitless multiplier): /olume % in parcel (areal % x richness factor):	minimum	median	maximum ———————————————————————————————————
۲	Portion of volume % that is offshore (0-100%)	-	<del>-</del>	<del></del>
F V	s in Gas Accumulations: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness factor):	minimum	<del>-</del>	maximum
F	Portion of volume % that is offshore (0-100%)		<u> </u>	<u> </u>
6.	NPS Protected Withdrawals (NPSP) represent	s	areal % of the total as:	sessment unit
F V	in Oil Accumulations: Richness factor (unitless multiplier): Yolume % in parcel (areal % x richness factor): Portion of volume % that is offshore (0-100%)	minimum	median	maximum 
F V	s in Gas Accumulations: Richness factor (unitless multiplier):  Yolume % in parcel (areal % x richness factor): Portion of volume % that is offshore (0-100%)	minimum	median	maximum
7.	US Forest Service (USFS) represent	s 7.99	areal % of the total ass	sessment unit
F V	in Oil Accumulations: Richness factor (unitless multiplier):  Yolume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median	maximum
F V	s in Gas Accumulations: Richness factor (unitless multiplier):  Yolume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median 1 0	maximum 
8.	USFS Wilderness Areas (USFSW) represent	s	areal % of the total ass	sessment unit
F V	in Oil Accumulations: Richness factor (unitless multiplier):  Yolume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median	maximum
F V	s in Gas Accumulations: Richness factor (unitless multiplier):  Yolume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median	maximum

9.	USFS Roadless Areas (USFSR) represents		areal % of the total ass	sessment unit
R	in Oil Accumulations:	minimum	median	maximum
	olume % in parcel (areal % x richness factor): Portion of volume % that is offshore (0-100%)		<u> </u>	
R V	s in Gas Accumulations:  Stichness factor (unitless multiplier):  Yolume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	· · · · · · · · · · · · · · · · · · ·	maximum
10.	USFS Protected Withdrawals (USFSF represents		areal % of the total ass	essment unit
R	in Oil Accumulations:  Stichness factor (unitless multiplier):  Yolume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median	maximum
R	s in Gas Accumulations:  Richness factor (unitless multiplier):  Yolume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median	maximum
11.	US Fish and Wildlife Service (USFWS represents		areal % of the total ass	essment unit
R	in Oil Accumulations:  Richness factor (unitless multiplier):  Yolume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median 	maximum
R	s in Gas Accumulations:  Stichness factor (unitless multiplier):  Yolume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median	maximum
12.	USFWS Wilderness Areas (USFWSW represents		areal % of the total ass	essment unit
R	in Oil Accumulations: Sichness factor (unitless multiplier):  Yolume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum		maximum
R V	s in Gas Accumulations: Richness factor (unitless multiplier): Yolume % in parcel (areal % x richness factor): Portion of volume % that is offshore (0-100%)	minimum	median ————————————————————————————————————	maximum

13. <u>USFWS Protected Withdrawals (USF)</u> represents		areal % of the total ass	sessment unit
Oil in Oil Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):	minimum		maximum
Portion of volume % that is offshore (0-100%)		<u> </u>	
Volume % in parcel (areal % x richness factor):	minimum	<del>-</del>	maximum 
Portion of volume % that is offshore (0-100%)		<u> </u>	
14. Wilderness Study Areas (WS) represents		areal % of the total ass	sessment unit
Oil in Oil Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median	maximum
Gas in Gas Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median	maximum
15. Department of Energy (DOE) represents		areal % of the total ass	sessment unit
Oil in Oil Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median	maximum
Gas in Gas Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median	maximum 
16. Department of Defense (DOD) represents		areal % of the total ass	sessment unit
Oil in Oil Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median	maximum
Gas in Gas Accumulations: Richness factor (unitless multiplier):	minimum	median	maximum
Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)			

17. Bureau of Reclamation (BOR) represents	6 0.45	_areal % of the total ass	sessment unit
Oil in Oil Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):	minimum	median	maximum
Portion of volume % that is offshore (0-100%)			
Gas in Gas Accumulations: Richness factor (unitless multiplier):	minimum	median	maximum
Volume % in parcel (areal % x richness factor): Portion of volume % that is offshore (0-100%)		0	
18. Tennessee Valley Authority (TVA) represents	S	_areal % of the total ass	sessment unit
Oil in Oil Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):	minimum	median	maximum —
Portion of volume % that is offshore (0-100%)			
Gas in Gas Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):	minimum	median	maximum ———————————————————————————————————
Portion of volume % that is offshore (0-100%)		- -	<del></del>
19. Other Federal represents	S	_areal % of the total ass	sessment unit
Oil in Oil Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):	minimum	median	maximum ———————————————————————————————————
Portion of volume % that is offshore (0-100%)		- -	
Gas in Gas Accumulations: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness factor):	minimum	median	maximum ———————————————————————————————————
Portion of volume % that is offshore (0-100%)		- -	
20represents	S	_areal % of the total ass	sessment unit
Oil in Oil Accumulations: Richness factor (unitless multiplier):	minimum	median	maximum
Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)		<u>-</u>	
Gas in Gas Accumulations:  Richness factor (unitless multiplier):	minimum	median	maximum ———————————————————————————————————
Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)		_	

## ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO ECOSYSTEMS Surface Allocations (uncertainty of a fixed value)

1. Grand Canyon Lands (GDCL) represents	2.83	areal % of the total assessment ur	nit
Oil in Oil Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median	maximum
Gas in Gas Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):	minimum	0	maximum
Portion of volume % that is offshore (0-100%)  2. Navajo Canyonlands (NVCL) represents	70.42	0 areal % of the total assessment ur	nit
Oil in Oil Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	-	maximum
Gas in Gas Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median 0 0	maximum
3. South-Central Highlands (SCHL) represents	10.02	areal % of the total assessment ur	nit
Oil in Oil Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median 	maximum
Gas in Gas Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median	maximum
4. White Mountain-San Francisco Peaks represents	16.74	areal % of the total assessment ur	nit
Oil in Oil Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	<u> </u>	maximum
Gas in Gas Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness factor):  Portion of volume % that is offshore (0-100%)	minimum	median	maximum

5	represents		areal % of the total ass	sessment ur	nit
Oil in Oil Accumulations: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness	factor):	minimum	=		maximum
Portion of volume % that is offshore (0-	100%)		<del></del>		
Gas in Gas Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness  Portion of volume % that is offshore (0-	factor):	minimum	median 	 	maximum
6.	_represents		areal % of the total ass	sessment ur	nit
Oil in Oil Accumulations: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-	factor):	minimum	median	 	maximum
Gas in Gas Accumulations: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-	factor):	minimum	median	 	maximum
7	_represents		areal % of the total ass	sessment ur	nit
Oil in Oil Accumulations: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-	factor):	minimum	median	 	maximum
Gas in Gas Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness  Portion of volume % that is offshore (0-	factor):	minimum	median	 	maximum
8	represents		_areal % of the total ass	sessment ur	nit
Oil in Oil Accumulations: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-	factor):	minimum	median 	 	maximum
Gas in Gas Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-	factor):	minimum	median	 	maximum

9	represents		areal % of the total	assessment u	init
Oil in Oil Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness to Portion of volume % that is offshore (0-1)	factor):	minimum	media	n 	maximum
Gas in Gas Accumulations: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness to Portion of volume % that is offshore (0-1)	factor):	minimum	-	n 	maximum
10	represents		areal % of the total	assessment u	ınit
Oil in Oil Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness for portion of volume % that is offshore (0-1)	factor):	minimum	media	n 	maximum
Gas in Gas Accumulations: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness for Portion of volume % that is offshore (0-1)	factor):	minimum	media		maximum
11	represents		areal % of the total	assessment u	ınit
Oil in Oil Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness for portion of volume % that is offshore (0-1)	factor):	minimum		n 	maximum
Gas in Gas Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness for Portion of volume % that is offshore (0-1)	factor):	minimum	media	n 	maximum
12	represents		areal % of the total	assessment ι	ınit
Oil in Oil Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness to Portion of volume % that is offshore (0-1)	factor):	minimum	media	n 	maximum
Gas in Gas Accumulations:  Richness factor (unitless multiplier):  Volume % in parcel (areal % x richness to Portion of volume % that is offshore (0-1)	factor):	minimum	media	n 	maximum

#### ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO LAND ENTITIES Subsurface Allocations (uncertainty of a fixed value)

Ва	sed on Data as of:					
1.	All Federal Subsurface	represents		_areal % of the total ass	sessment ur	nit
F	in Oil Accumulations: Richness factor (unitless multiplier):/olume % in parcel (areal % x richness Portion of volume % that is offshore (0-1)	factor):	minimum	median		maximum
F \	s in Gas Accumulations: Richness factor (unitless multiplier): Volume % in parcel (areal % x richness Portion of volume % that is offshore (0-1)	factor):				maximum
2.	Other Subsurface	represents		areal % of the total ass	sessment ur	nit
F	in Oil Accumulations: Richness factor (unitless multiplier): /olume % in parcel (areal % x richness Portion of volume % that is offshore (0-1	factor):	minimum			maximum
F	s in Gas Accumulations: Richness factor (unitless multiplier): /olume % in parcel (areal % x richness	factor):	minimum	median 		maximum